

**REMARKS**

This response is submitted with a request for a three month extension and appropriate fee in reply to the Office Action dated March 25, 2005. Claims 1, 3-11, 13-16, 18 and 20-23 currently stand rejected. Applicants have amended claims 4, 13, 18 and 21-23 to more particularly point out the patentable differences between the claims of the present application and the cited references. No new matter has been added by the amendment.

In light of the amendment and the remarks presented below, Applicants respectfully request reconsideration and allowance of all now-pending claims of the present invention.

**Claim Rejections - 35 USC §103**

**Claims 1, 3-5, 7-11, 13, 14, 16, 18 and 20-23**

Claims 1, 3-5, 7-11, 13, 14, 16, 18 and 20-23 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Merchant et al. (U.S. Patent No. 6,775,290, hereinafter “Merchant”), in view of Rijhsinghani et al. (U.S. Patent No. 6,526,052, hereinafter “Rijhsinghani”), and further in view of Denning et al. (“Location-Based Authentication: Grounding Cyberspace for Better Security”; copyright 1996; pages 1-6, hereinafter “Denning”).

Independent claim 1 recites, *inter alia*, a processor that communicates with an access concentrator to receive a plurality of port identifiers assigned by the access concentrator wherein each port identifier is associated with a location-specific connection port. In other words, the present application discloses a method and apparatus for implementing location-based identification in a communication network. Such location-based identification is not limited to identification of a particular address or port, as disclosed in the cited references. Rather, location-based identification identifies service recipients by their location and not just by port or address. Thus, for example, a floor of a building, a wing of a building, or an entire building may be one location in which all ports have a same location-specific identification (see page 10, lines 23-25).

To the contrary, the cited references fail to teach or suggest a processor that communicates with an access concentrator to receive a plurality of port identifiers assigned by the access concentrator wherein each port identifier is associated with a location-specific connection port as claimed in independent claim 1. Merchant is directed to a port of a network switch that routes data packets having VLAN identifiers that match stored VLAN identifiers supported by the port to corresponding supported VLANs (col. 1, lines 52-63). As stated in the Office Action, Merchant does not disclose each port identifier is associated with a location-specific connection port. As such, the Office Action cites Rijhsinghani as teaching “[determining] the appropriate VLAN tag to add to the communication before transmission via the turnk port to the high speed LAN backbone or trunk 265”. There is no teaching or suggestion in Rijhsinghani, in general, or the cited passage, in particular, that the VLAN tag is associated with a location-specific connection port as claimed in independent claim 1. Furthermore, Rijhsinghani specifically teaches that VLANs may be defined as either port based, protocol based, address-based, or some combination of port, address and protocol based (col. 9, lines 30-34). In light of Rijhsinghani’s specific teaching of VLANs defined as other than location-based and the absence of any teaching or suggestion of location-specific connection ports in Rijhsinghani, it cannot be fairly suggested that Rijhsinghani teaches or suggests a processor that communicates with an access concentrator to receive a plurality of port identifiers assigned by the access concentrator wherein each port identifier is associated with a location-specific connection port as claimed in independent claim 1. While Denning is not cited as showing such feature, it should be noted that Denning is directed to location based authentication, but fails to teach or suggest each port identifier is associated with a location-specific connection port as claimed in independent claim 1.

Since Merchant, Rijhsinghani and Denning each fail to teach or suggest a processor that communicates with an access concentrator to receive a plurality of port identifiers assigned by the access concentrator wherein each port identifier is associated with a location-specific connection port as claimed in independent claim 1, any combination of the cited references also fails to teach or suggest the subject matter of independent claim 1. Thus, the cited references, taken either individually or in combination, do not render independent claim 1 obvious.

Applicants respectfully submit that independent claims 7 and 18 also recite a location-specific connection port as claimed in independent claim 1. Since the cited references fail both individually and in combination to teach such feature, independent claims 7 and 18 are patentable for at least the same reasons as given above for independent claim 1. Furthermore, claims 3-5, 8-11, 13, 14, 16 and 20-23 depend either directly or indirectly from corresponding independent claims 1, 7 and 18, and thus include all the recitations of their corresponding independent claims. Dependent claims 3-5, 8-11, 13, 14, 16 and 20-23 are patentable for at least the same reasons as given above for independent claims 1, 7 and 18.

Accordingly, Applicants respectfully submit that the rejections of claims 1, 3-5, 7-11, 13, 14, 16, 18 and 20-23 are overcome.

Claims 4-6, 13-16 and 21

Dependent claims 4, 13 and 21 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Merchant, in view of Rijhsinghani, and further in view of Denning. Although dependent claims 4, 13 and 21 are patentable at least due to their dependency on independent claims 1, 7 and 18, respectively, as stated above, there are still further reasons for the patentability of claims 4, 13 and 21.

Claim 4 has been amended to recite, *inter alia*, a querying agent capable of requesting transmission of the plurality of port identifiers from the associated access concentrator in response to receipt of data packets that fail to include location information.

None of the cited references, in general, or the cited passages of those references, in particular, teach or suggest a querying agent capable of requesting transmission of the plurality of port identifiers from the associated access concentrator in response to receipt of data packets that fail to include location information as claimed in claim 4. In both Merchant and Rijhsinghani, VLAN tags or identifiers are transmitted with data packets. Thus, no querying agent is taught or suggested by Merchant or Rijhsinghani which requests transmission of port identifiers in response to receipt of data packets that fail to include location information as claimed in claim 4. Denning discloses authentication via GPS based location signatures in which

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GPS location data is requested from a remote client, however, port identifiers are not requested, nor is anything requested from an access concentrator.

Accordingly, since Merchant, Rijhsinghani and Denning each fail to teach or suggest a querying agent capable of requesting transmission of the plurality of port identifiers from the associated access concentrator in response to receipt of data packets that fail to include location information as claimed in claim 4, any combination of the cited references also fails to teach or suggest the subject matter of claim 4. Thus, the cited references, taken either individually or in combination, do not render claim 4 obvious. Claim 13 is a method for practicing the claimed features of the device of claim 4, and thus claim 13 is patentable for at least the same reasons as given above for claim 4. Additionally, claims 5, 6 and 14-16 depend from claims 4 and 13, respectively, and are thus patentable at least due to their dependency from claims 4 and 13, which are believed to be allowable.

Claim 21 recites, *inter alia*, applying the identified one or more location-specific connection ports to a network billing application that bills subscribers based on location. It is respectfully submitted that none of the cited references teach or suggest such feature. Furthermore, the Office Action fails to allege that such feature is taught or suggested in any of the cited references. As such, since none of the cited references, either alone or in combination, teaches or suggests applying the identified one or more location-specific connection ports to a network billing application that bills subscribers based on location as recited in claim 21, the cited references fail to render claim 21 obvious.

Accordingly, Applicants respectfully submit that the rejections of claims 4-6, 13-16 and 21 are overcome.

#### Claims 6 and 15

Claims 6 and 15 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Merchant, in view of Rijhsinghani, in view of Denning, and further in view of Hunt et al. (U.S. Patent No. 6,539,422, hereinafter “Hunt”).

As stated above, Merchant, Rijhsinghani and Denning fail, individually and in combination, to teach or suggest a location-specific connection port as claimed in independent

claims 1 and 7. Hunt is directed to an automatic data collection (ADC) device having a network communications capability. There is no teaching or suggestion in Hunt of any location-specific connection port. Thus, the cited references, either individually or in combination, fail to render independent claims 1 and 7 obvious. Claims 6 and 15 depend indirectly from independent claims 1 and 7, respectively, and thus include all the recitations of their corresponding independent claims. Dependent claims 6 and 15 are patentable for at least those reasons given above for independent claims 1 and 7.

Furthermore, even assuming Hunt discloses a location-specific connection port, Hunt is not a proper reference to be combined with Merchant, Rijhsinghani and Denning since Hunt is not analogous art. To rely on a reference under 35 U.S.C. §103, it must be analogous prior art. See MPEP 2141.01(a). The two-part test for analogous art requires that “the reference must either be in the field of applicant’s endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned.” *In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992). See also *State Contracting & Eng’g Corp. v. Condotte America, Inc.*, 346 F.3d 1057, 1069, 68 USPQ2d 1481, 1490 (Fed.Cir. 2003) (where the general scope of a reference is outside the pertinent field of endeavor, the reference may be considered analogous art if subject matter disclosed therein is relevant to the particular problem with which the inventor is involved). Hunt is directed to a method and system for remotely controlling operation of networked ADC devices, such as bar code readers. The problem to be addressed in this art is allowing a plurality of ADC devices to communicate to a network. To the contrary, the present application is directed to location-based identification of data packet senders/receivers. The problem to be addressed in this art is providing services responsive to the location of a user. Hunt and the present application are not in the same field of endeavor. Additionally, the present application involves determining a location of a network user. However, Hunt is unconcerned with the issue of network user location. There would be no reason for one skilled in the art of providing location-based services to look to the art of networking ADC devices. Therefore, Hunt is not reasonably pertinent to the particular problem with which the inventor was concerned. Thus, Hunt is not an appropriate reference under 35 U.S.C. §103. Since neither Merchant, Rijhsinghani nor Denning teach a querying agent using Extensible Markup Language (XML) as

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Amdt. dated 09/26/2005  
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claimed in claims 6 and 15, it is respectfully submitted that claims 6 and 15 are not obvious in view of the cited references.

Accordingly, Applicants respectfully submit that the rejections of claims 6 and 15 are overcome.

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Amtd. dated 09/26/2005  
Reply to Office action of 03/25/2005

### CONCLUSION

In view of the amended claims and the remarks submitted above, it is respectfully submitted that the present claims are in condition for immediate allowance. It is therefore respectfully requested that a Notice of Allowance be issued. The Examiner is encouraged to contact Applicant's undersigned attorney to resolve any remaining issues in order to expedite examination of the present invention.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,



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"Express Mail" Mailing Label Number EV 659484194 US  
Date of Deposit: September 26, 2005

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CLT014750139v1